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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-095-02111 County Tyler District Centerville
Quad Shirley Pad Name SHR 1 Field/Pool Name _____
Farm name Noble Energy, Inc Well Number SHR 1CHS
Operator (as registered with the OOG) Noble Energy, Inc
Address 333 Technology Drive Suite 110 City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4362828.00 Easting 513254.76
Landing Point of Curve Northing 4362655.39 Easting 513239.36
Bottom Hole Northing 4360101.30 Easting 514217.55

Elevation (ft) 1013.55' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Synthetic Oil Based

Date permit issued 5/24/2013 Date drilling commenced 9/11/2014 Date drilling ceased 12/16/2013
Date completion activities began 5/5/2014 Date completion activities ceased 6/29/2014
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 321', 351', 599' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1501' Void(s) encountered (Y/N) depths N
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

RECEIVED
Office of Oil and Gas
Reviewed by: _____
SEP 15 2014

API 47-095 - 02111 Farm name Noble Energy, Inc Well number SHR 1CHS

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24	20	120	N	J-55 133#		Y
Surface	17-1/2	13-3/8	717	N	J-55 54.5#		Y
Coal							
Intermediate 1	12-3/8	9-5/8	2374	N	J-55 36#		Y
Intermediate 2							
Intermediate 3							
Production	8-3/4	5-1/2	15757	N	P-110 20#		Y
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Type 1	609	15.6	1.2	129	0	8
Coal							
Intermediate 1	Class A	931	15.6	1.19	197	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	2642	14.8	1.41	686	0	8
Tubing							

Drillers TD (ft) 15769 Loggers TD (ft) _____
 Deepest formation penetrated Marcellus Plug back to (ft) 5415
 Plug back procedure 2 Plugs Set. Plug #1 at 6020'- 261 Sacks 17.5ppg .94 yield = 43 barrels. Plug #2 at 5415'- 261 Sacks 17.5ppg .94 yield = 43 barrels.

Kick off depth (ft) 5415

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING Surface: 6 Centralizers, On every 3 joints of casing;
Intermediate: 38 Centralizers, On every 3 joints of casing. Production: 290 Centralizers, On every 3rd joint of casing from Surface to Top of Curve, then every joint to TD

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 095 - 02111 Farm name Noble Energy, Inc Well number SHR 1CHS

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		Please See Attached			

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
		Please See Attached						

Please insert additional pages as applicable.

PERFORATION RECORD

API: 47-095-02111

Farm name: Noble Energy, Inc

Well Name: SHR 1C-HS

Stage No.	Perf Date	Top Perf	Bottom Perf	# of Perfs	Formation
Toe Sleeve	3/26/2014	15,624	15,626	0	Marcellus
1A	5/4/2014	15,484	15,614	40	Marcellus
1B Reperf + inj test	5/10/2014	15,474	15,597	40	Marcellus
1C	Did not perf 1C				Marcellus
2	5/10/2014	15,335	15,437	40	Marcellus
3	5/11/2014	15,185	15,287	40	Marcellus
4	5/11/2014	15,035	15,137	40	Marcellus
5	5/12/2014	14,885	14,987	40	Marcellus
6	5/13/2014	14,735	14,837	40	Marcellus
7	5/13/2014	14,585	14,687	40	Marcellus
8	5/14/2014	14,435	14,537	40	Marcellus
9A	5/14/2014	14,285	14,387	40	Marcellus
9 Reperf	5/14/2014	14,275	14,351	40	Marcellus
10	5/14/2014	14,135	14,237	40	Marcellus
11	5/15/2014	13,985	14,087	40	Marcellus
12	5/16/2014	13,835	13,937	40	Marcellus
13	5/17/2014	13,685	13,787	40	Marcellus
14	5/17/2014	13,535	13,637	40	Marcellus
15	5/17/2014	13,385	13,487	40	Marcellus
16	5/18/2014	13,235	13,337	40	Marcellus
17	5/18/2014	13,085	13,187	40	Marcellus
18	5/18/2014	12,935	13,037	40	Marcellus
19	5/18/2014	12,785	12,887	40	Marcellus
20	5/19/2014	12,635	12,737	40	Marcellus
21A	5/19/2014	12,485	12,587	40	Marcellus
21 Reperf	5/20/2014	12,475	12,506	16	Marcellus
22A + inj test	5/30/2014	12,335	12,437	40	Marcellus
22 Reperf	5/30/2014	12,330	12,394	48	Marcellus
22C	5/31/2014	12,185	12,287	40	Marcellus
23	6/1/2014	12,035	12,137	40	Marcellus
24	6/1/2014	11,885	11,987	40	Marcellus
25	6/1/2014	11,735	11,837	40	Marcellus
26	6/1/2014	11,585	11,687	40	Marcellus
27	6/5/2014	11,435	11,537	40	Marcellus
28	6/5/2014	11,285	11,387	40	Marcellus
29	6/5/2014	11,135	11,237	40	Marcellus
30	6/5/2014	10,985	11,087	40	Marcellus
31	6/5/2014	10,835	10,937	40	Marcellus
32	6/6/2014	10,685	10,787	40	Marcellus
33	6/6/2014	10,535	10,637	40	Marcellus

10/03/2014

PERFORATION RECORD

API: 47-095-02111

Farm name: Noble Energy, Inc

Well Name: SHR 1C-HS

Stage No.	Perf Date	Top Perf	Bottom Perf	# of Perfs	Formation
34	6/6/2014	10,385	10,487	40	Marcellus
35	6/6/2014	10,235	10,337	40	Marcellus
36	6/6/2014	10,085	10,187	40	Marcellus
37	6/6/2014	9,935	10,037	40	Marcellus
38	6/7/2014	9,785	9,887	40	Marcellus
39	6/7/2014	9,635	9,737	40	Marcellus
40	6/7/2014	9,485	9,587	40	Marcellus
41	6/7/2014	9,335	9,437	40	Marcellus
42	6/7/2014	9,185	9,287	40	Marcellus
43	6/7/2014	9,035	9,137	40	Marcellus
44	6/7/2014	8,885	8,987	40	Marcellus
45	6/8/2014	8,735	8,837	40	Marcellus
46	6/8/2014	8,585	8,687	40	Marcellus
47	6/8/2014	8,435	8,537	40	Marcellus
48	6/8/2014	8285	8387	40	Marcellus
49	6/8/2014	8135	8237	40	Marcellus
50	6/8/2014	7985	8087	40	Marcellus
51	6/9/2014	7835	7937	40	Marcellus
52	6/9/2014	7685	7787	40	Marcellus
53	6/9/2014	7535	7637	40	Marcellus
54	6/9/2014	7385	7487	40	Marcellus
55	6/9/2014	7235	7337	40	Marcellus
56	6/9/2014	7085	7187	40	Marcellus
57	6/9/2014	6935	7037	40	Marcellus

10/03/2014

STIMULATION INFORMATION PER STAGE

API: 47-095-02111

Farm name: Noble Energy, Inc

Well Name: SHR 1C-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
1A	5/5/2014			7,092		41050	8,549	
1B Reperf + inj test	5/10/2014	44.7	8,605		6,316		3,383	
1C	5/10/2014	71.2	8,702	7,092	4,710	216945	13,699	
2	5/11/2014	75.1	8,395	6,422	4,237	249600	7,382	
3	5/11/2014	84.6	8,362	5,810	4,274	246997	6,630	
4	5/12/2014	85.7	8,160		4,406	250700	7,178	
5	5/12/2014	86.3	7,981	5,615	4,162	244500	6,930	
6	5/13/2014	83.1	8,098	7,056	4,422	251000	7,787	
7	5/14/2014	85.2	7,916	5,497	4,905	244800	6,525	
8	5/14/2014	88.4	8,177	5,621	4,106	248500	6,265	
9A	5/14/2014	58.6	8,570	5,831	4,701	257400	3,661	
9 Reperf	5/14/2014	62.7	8,573		3,627		12,801	
10	5/15/2014	86.7	8,046	5,664	4,960	250700	6,800	
11	5/16/2014	76.7	8,210	5,452	4,756	249638	10,614	
12	5/17/2014	78.3	7,701	5,687	4,712	243000	7,427	
13	5/17/2014	83.9	7,788	5,581	4,789	249378	6,897	
14	5/17/2014	88.2	7,986	5,596	4,694	245867	5,977	
15	5/17/2014	85.6	8,233	5,829	4,249	247344	6,536	
16	5/18/2014	85.5	8,042	5,523	4,706	246950	6,570	
17	5/18/2014	89.3	7,844	5,377	4,967	247076	6,125	
18	5/18/2014	89.0	7,936	5,500	4,072	247961	6,283	
19	5/19/2014	86.4	7,722	5,724	4,843	246500	6,415	
20	5/19/2014	84.0	7,497	5,617	4,251	246400	6,242	
21A	5/20/2014	8.3	9,018	5,748	4,679	225900	2,585	
21 Reperf	5/21/2014	70.5	7,960				9,840	
22A + inj test	5/30/2014	50.2	8,860	5,633	5,316	5589	6,750	
22 Reperf	5/30/2014	66.6	8,429		5,097	2200	3,155	
22C	5/31/2014	86.3	7,219		4,409	495600	10,990	
23	6/1/2014	87.8	7,922	5,578	4,725	247080	6,504	
24	6/1/2014	81.8	8,323	5,514	4,817	207940	8,590	
25	6/2/2014	66.5	7,477	5,576		270500	7,026	
26	6/5/2014	87.5	7,517	5,804	4,338	249800	6,976	
27	6/5/2014	89.8	7,795	5,873	4,862	249600	6,513	
28	6/5/2014	66.3	7,716	6,140	4,283	248800	10,575	
29	6/5/2014	81.7	7,104	5,854	4,593	245200	6,769	
30	6/5/2014	88.7	7,582	5,113	4,840	249800	6,481	
31	6/6/2014	87.0	7,342	5,715	4,806	248900	6,858	
32	6/6/2014	88.5	7,565	6,160	4,734	248200	6,364	
33	6/6/2014	84.5	7,479	5,692	4,917	246351	5,857	
34	6/6/2014	87.6	7,592	6,118	4,516	247433	6,054	

10/03/2014

STIMULATION INFORMATION PER STAGE

API: 47-095-02111

Farm name: Noble Energy, Inc

Well Name: SHR 1C-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLS)	Amount of N ² / other
35	6/6/2014	90.5	7,500	5,945	5,031	247485	6,023	
36	6/6/2014	88.6	7,020	5,545	4,809	249900	7,884	
37	6/7/2014	90.4	7,183	5,603	4,674	247900	6,479	
38	6/7/2014	89.4	6,998	5,559	4,409	249600	6,752	
39	6/7/2014	87.8	7,094	5,486	4,935	247200	7,146	
40	6/7/2014	89.1	6,820	5,235	4,660	246568	6,409	
41	6/7/2014	87.9	6,876	5,710	4,889	248784	5,879	
42	6/7/2014	88.9	6,621	5,519	4,582	249600	5,938	
43	6/7/2014	90.3	7,074	6,030	4,589	249700	6,326	
44	6/8/2014	89.5	6,739	5,354	5,032	247900	6,104	
45	6/8/2014	90.0	6,885	5,435	4,989	247956	5,867	
46	6/8/2014	90.1	6,899	6,434	5,111	246733	6,430	
47	6/8/2014	89.9	6,702	5,782	4,554	247706	5,903	
48	6/8/2014	90.1	6,996	6,541	4,465	248449	6,446	
49	6/8/2014	89.9	7,086	6,192	4,074	248400	7,359	
50	6/8/2014	90.0	6,596	6,069	4,592	248900	5,924	
51	6/9/2014	90.3	7,009	6,442	4,872	249300	6,030	
52	6/9/2014	90.9	6,800	5,421	4,846	249300	5,763	
53	6/9/2014	90.0	6,811	6,018	4,813	246700	5,657	
54	6/9/2014	89.8	6,558	6,863	4,708	247000	5,952	
55	6/9/2014	90.0	6,619	6,219	4,904	246400	5,604	
56	6/9/2014	90.3	6,771	6,288	4,819	246600	5,561	
57	6/9/2014	89.0	7,233	5,858	4,746	249123	5,772	

API 47- 095 - 02111 Farm name Noble Energy, Inc Well number SHR 1CHS

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6539.8'</u> TVD	<u>15769'</u> MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 5461 mcfpd Oil 0 bpd NGL 341 bpd Water 384 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>0</u>		<u>0</u>		

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Rig #542
Address 10350 Richmond Ave City Houston State TX Zip 77042

Logging Company Diversified Well Logging
Address 10350 Richmond Ave City Eighty Four State PA Zip 15330

Cementing Company Schlumberger
Address 4600 J Barry Ct., Suite 200 City Canonsburg State PA Zip 15317

Stimulating Company FTS International
Address 6000 Town Center Boulevard, Suite 120 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Regina Logue Telephone 724-820-3559
Signature Regina Logue Title Regulatory Analyst Date 9/11/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

SHR 1C

47-095-02111

Formations	Top TVD	Base TVD	Top MD	Base MD	Fluid
Shale	0	1205	0	1205	
Shale and Sandstone	1205	1928	1205	1928	
Big Lime	1928	2056	1928	2056	
Big Injun	2056	2163	2056	2163	
Price	2163	2314	2163	3470	
Weir	2314	2418	2314	2418	
Shale	2418	2505	2418	2505	
Berea	2505	2513	2505	2513	
Shale	2513	2694	2513	2694	
Sandstone	2694	2796	2694	2796	
Shale	2796	2932	2796	2932	
Sandstone	2932	2950	2932	2950	
Shale	2950	3424	2950	3424	
Warren	3424	3470	3424	3470	
Shale and Sandstone	3470	3822	3470	3822	
Lower Huron	3822	4580	3822	4580	
Sandstone	4580	4618	4580	4618	
Shale	4618	4812	4618	4812	
Sandstone	4812	4868	4812	4868	
Shale	4868	4992	4868	4992	
Benson	4992	5036	4992	5036	
Shale	5036	5236	5036	5236	
Alexander	5236	5294	5236	5294	
Shale	5294	6235	5294	6270	
Cashaqua	6235	6346	6270	6424	
Middlesex	6346	6380	6424	6480	
West River	6380	6448	6480	6615	
Burkett	6448	6482	6615	6697	
Tully	6482	6485	6697	6705	
Hamilton	6485	6502	6705	6753	
Marcellus	6502	6566	6753	7062	Gas
Onondaga	6566	6573	7062	not encountered	
Huntersville	6573	not encountered	not encountered	not encountered	

10/03/2014

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/5/2014
Job End Date:	6/9/2014
State:	West Virginia
County:	Tyler
API Number:	47-095-02111-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	SHR 1C
Longitude:	-80.84619700
Latitude:	39.41478900
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,539
Total Base Water Volume (gal):	17,966,449
Total Base Non Water Volume:	0



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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier					
			Water	7732-18-5	100.00000	89.99836	
40/70 White	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	6.87344	
100 Mesh Sand	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	1.75724	
Hydrochloric Acid (HCl)	FTSI	Acid					
			Water	7732-18-5	92.50000	1.10711	
			Hydrogen Chloride	7647-01-0	7.50000	0.08977	
FRW-600	FTSI	Friction Reducer					
			Acrylamide Polymer	Trade Secret	75.00000	0.05277	
			Hydrotreated light distillate	64742-47-8	20.00000	0.01407	
			Ammonium acetate	631-61-8	5.00000	0.00352	
CS-500 SI	FTSI	Scale inhibitor					
			Water	7732-18-5	55.00000	0.02639	
			Acrylic Polymer	Proprietary	24.00000	0.01152	
			Ethylene glycol	107-21-1	10.00000	0.00480	
			Sodium chloride	7647-14-5	6.00000	0.00288	
			Sodium Polyacrylate	9003-04-7	5.00000	0.00240	

CI-3240	FTSI	Biocide				
			Water	7732-18-5	53.00000	0.02055
			Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione.	533-74-4	24.00000	0.00931
			Sodium Hydroxide	1310-73-2	23.00000	0.00892
HVG-1	FTSI	Water Gelling Agent				
			Guar Gum	9000-30-0	35.00000	0.00335
			Petroleum Distillate	64742-47-8	30.00000	0.00287
			Raffinates (Petroleum), Sorption Process	64741-85-1	25.00000	0.00239
			Clay	1302-78-9	3.00000	0.00029
			Clay	14808-60-7	2.00000	0.00019
			Surfactant	Proprietary	2.00000	0.00019
			Surfactant	24938-91-8	1.00000	0.00010
			Surfactant	9043-30-5	1.00000	0.00010
			Surfactant	154518-36-2	1.00000	0.00010
FE-100L	FTSI	Iron control				
			Citric acid	77-92-9	55.00000	0.00209
			Water	7732-18-5	45.00000	0.00171
CI-150	FTSI	Acid Corrosion Inhibitor				
			Isopropanol	67-63-0	24.70000	0.00052
			Organic amine resin salt	Proprietary	24.00000	0.00051
			Ethylene Glycol	107-21-1	20.00000	0.00042
			Alkylene Oxide Block Polymer	Proprietary	10.00000	0.00021
			Dimethylformamide	68-12-2	5.00000	0.00011
			Aromatic aldehyde	Proprietary	5.00000	0.00011
			Quaternary ammonium compound	Proprietary	5.00000	0.00011
			Water	7732-18-5	5.00000	0.00011
			Diethylene glycol	111-46-6	1.00000	0.00002
			Fatty Acid	Proprietary	0.10000	0.00000
			Fatty Acid Salt	Proprietary	0.10000	0.00000
			Aliphatic alcohol	Proprietary	0.10000	0.00000
NE-100	FTSI	Non-emulsifier				
			Water	7732-18-5	71.50000	0.00075
			2-Butoxyethanol	111-76-2	10.00000	0.00011
			2-Propanol	67-63-0	10.00000	0.00011
			Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00005
			Benzene, C10-16 Alkyl Derivatives	68648-87-3	1.00000	0.00001
			Unsulphonated Matter	Proprietary	1.00000	0.00001
			Sulfur Dioxide	7446-09-5	1.00000	0.00001
			Sulfuric Acid	7664-93-9	0.50000	0.00001
APB-1	FTSI	Gel breaker				

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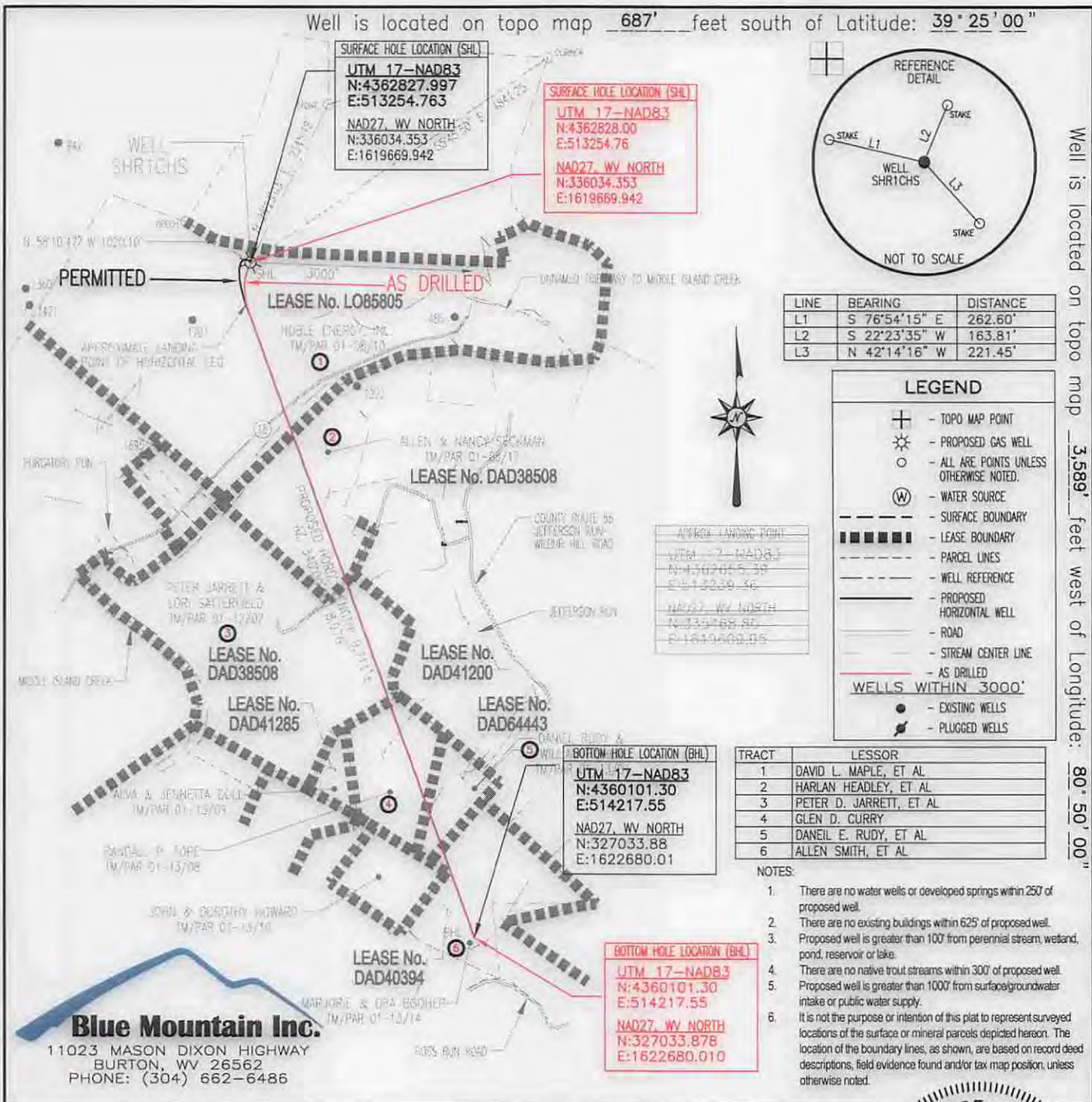
	Ammonium Persulfate	7727-54-0	100.00000	0.00044
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Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

- * Total Water Volume sources may include fresh water, produced water, and/or recycled water
- ** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

Well is located on topo map 687 feet south of Latitude: 39° 25' 00"



Well is located on topo map 3589 feet west of Longitude: 80° 50' 00"

FILE #: SHR1CHS-AS DRILLED
 DRAWING #: SHR1CHS-AS DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: [Signature]
 R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D. SIX
 LICENSED
 No. 2000
 STATE OF
 WEST VIRGINIA
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: AUGUST 26, 2014
 OPERATOR'S WELL #: SHR1CHS-AS DRILLED
 API WELL #: 47 95 02111H6A
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE ISLAND CREEK ELEVATION: 1018.27'
 COUNTY/DISTRICT: TYLER COUNTY / CENTERVILLE DISTRICT QUADRANGLE: SHIRLEY, WV 7.5'
 SURFACE OWNER: NOBLE ENERGY, INC. ACREAGE: 580.207±
 OIL & GAS ROYALTY OWNER: SEE TABLE IN DRAWING ACREAGE: 959.407±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,621'± TMD: 15,964'±
 WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
 Address 333 TECHNOLOGY DRIVE, SUITE 110 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301

10/03/2014